

# **EXHIBIT GG**

TO DECLARATION OF S. MERRILL WEISS IN  
SUPPORT OF PLAINTIFF ACACIA MEDIA  
TECHNOLOGIES CORPORATION'S MEMORANDUM  
OF POINTS AND AUTHORITIES IN OPPOSITION TO  
ROUND 3 DEFENDANTS' MOTION FOR SUMMARY  
JUDGMENT OF INVALIDITY UNDER 35 U.S.C. § 112  
OF THE '992, '863, AND '702 PATENTS; AND  
SATELLITE DEFENDANTS' MOTION FOR  
SUMMARY JUDGMENT OF INVALIDITY OF THE  
'992, '863, AND '720 PATENTS

# Chronology of Microsoft Windows Operating Systems

Copyright © 2007-2008 Ken Polsson  
 internet e-mail: [kpolsson@islandnet.com](mailto:kpolsson@islandnet.com)

All rights reserved. Permission is granted to create web links  
 to this site, not to copy these pages to other web sites.  
 URL: <http://www.islandnet.com/~kpolsson/windows/>

This document is an attempt to bring various published sources together to present a timeline about Microsoft Windows Operating Systems.

## Computer/printer supplies links:

- compatible cartridges - cheap photo paper - discount printer parts

References are numbered in [brackets], which are listed [here](#). A number after the dot gives the page in the source.

*Last updated: 2008 October 29.*

### **Fix Microsoft Windows**

Fix Microsoft Windows In 1 Minute 100%  
 Free Scan! Recommended  
[Microsoft-Errors.ErrorFix.com](http://Microsoft-Errors.ErrorFix.com)

### **Registry Cleaners Exposed**

Don't Download Any Registry Cleaner Until  
 You See This Shocking Review!  
[RegistryCleanerHelp.org](http://RegistryCleanerHelp.org)

### **Repair Windows Vista**

Free Registry Scan, Fix Errors & Improve Performance - 5 Star Rated  
[www.PCTools.com](http://www.PCTools.com)

V V

Ads

<a href="#">1981-1989</a>	<a href="#">1990-1993</a>	<a href="#">1994-1996</a>	<a href="#">1997-1999</a>	<a href="#">2000-end</a>
---------------------------	---------------------------	---------------------------	---------------------------	--------------------------

## 1981

### September

- Microsoft begins work on a graphical user interface for *MS-DOS*, initially called *Interface Manager* because it would effectively hide the interface between programs and devices like printers and video cards (*This is the beginning of Windows.*) [346.175] [1648.51]

## 1983

### (month unknown)

- Microsoft shows IBM a raw version of *Windows*. IBM is not interested as they are already developing what would be called *TopView*. [45]

### April

- Microsoft gives a "smoke-and-mirrors" demonstration of *Interface Manager* (later called *Windows*). It consists entirely of overlapping windows, appearing to be running programs simultaneously. [477] [1299.220]

### (month unknown)

Exhibit G G Page 551

- Microsoft marketer Rowland Hanson convinces Bill Gates to change the name of *Interface Manager* to *Windows*. [477.164] [1149.252]

**November**

- Microsoft again shows *Windows* to IBM, and again IBM is not interested. [45]

**November 10**

- At the Helmsley Palace Hotel in New York City, Microsoft formally announces *Microsoft Windows* for the IBM PC. This is the most elaborate product introduction in industry history. *Windows* is promised release in April, 1984. Bill Gates predicts that by the end of 1984, *Windows* would be used on over all IBM compatible PCs. (*The first version doesn't even ship until late 1985.*) [9] [45] [123] [137] [346.177] [389.28] [416.67] [477.158] [548.159] [909.228] [1149.258] [1299.241] [1639.108] [1648.52] [1799.3] [1897.124,128] (November 21 [1149.313]) (v1.03 [346.187,268] [1648.52] [1799.3] [1897.124,128] (November 21 [1149.313]) (v1.03 [346.187,268])

## 1984

**May**

- Microsoft ships software developer kits for *Windows*. [909.229]

**June**

- At Microsoft, Bill Gates and Steve Ballmer write an internal applications strategy memo on the company's commitment to the graphical user interface, on the Macintosh and for *Windows*. [686.148] [1299.241]

**October**

- Microsoft gives a demonstration of the final version of *Windows* to IBM. For the third time, IBM is not interested. [45]

## 1985

**May**

- Microsoft demonstrates *Microsoft Windows* at Spring COMDEX. Release date is set for June, at a price of US\$95. [346.187]

**June**

- Microsoft announces *Windows* 1.0. [75] [150]

**July**

- Micrografx releases *In-A-Vision*, the first application for *Microsoft Windows* from an independent company. [346.191] [307.95] [1149.391] [1299.294]
- Microsoft ships the "premiere edition" of *Windows* to software developers, OEM customers, and selected press members. [1299.284]

**November 20**

- Microsoft ships *Microsoft Windows* version 1.01 for the IBM PC, for US\$100. It is delivered two weeks after the initial announcement of the product. [16] [107] [117] [120] [123] [130] [134] [136] [146] [346.192] [477.159] [548.159] [909.230] [1089.D3] [1133.22] [1280.46] [1299.292] [1629.34] [1648.52] [1799.3] [1897.124,128] (November 21 [1149.313]) (v1.03 [346.187,268] [1648.52] [1799.3] [1897.124,128] (November 21 [1149.313]) (v1.03 [346.187,268])

**November 22**

- Apple Computer and Microsoft sign a licensing agreement permitting Microsoft royalty-free rights to use the graphical display technology of the Macintosh for *Windows* 1.0, and Macintosh versions of several Microsoft products. [309.256] [346.192] [477.170] [1149.314] [1205.34] [1299.292] (1984 [38])

## 1986

**January**

- Lotus Development announces it would support *Microsoft Windows* with future product releases.

[1133.22]

- Two months after releasing *Microsoft Windows*, Microsoft has shipped 35,000 copies. [1133.22]

### **February**

- Microsoft releases a French version of *Microsoft Windows* 1.02. [346.268]
- Microsoft urges *MS-DOS* program developers to adopt the programming rules of *Windows*, to ensure work under future versions of *DOS* and *Windows*. [1133.22]

### **(month unknown)**

- Microsoft purchases Dynamical Systems Research, maker of a *TopView* clone called *Mondrian*, for US\$1.5 million in Microsoft stock. Microsoft makes the purchase for *TopView* compatibility in *Windows* [45] [1299.314]
- At Microsoft, Steve Ballmer tries to convince Bill Gates to abandon *Windows* and put full emphasis on *Presentation Manager* for *OS/2*. Bill Gates decides against it. [1149.348]

## **1987**

### **April 2**

- Microsoft announces *Microsoft Windows* 2.0. [123] [137] [1299.328] [1648.52] (April 1 [909.231])

### **July**

- In New York, Microsoft's Steve Ballmer demonstrates *Windows* 2 for 600 software developers. [1299.346]

### **October 6**

- Microsoft announces *Microsoft Windows* 2.0, and *Microsoft Windows/386*, priced at US\$195. [1299.346] [477.159] (September [909.231])
- Microsoft unveils the *Microsoft Excel* spreadsheet software for *Microsoft Windows* 2.0, the first native application for *Windows*. Included is *Microsoft Windows* v2.01. [119] [123] [346.204] [389.28] [1648.52] [1299.328] [1049.147] [1299.293,346,359] [1559] [1631.40] [1639.110] (November [346.270])

### **December 9**

- Microsoft ships *Microsoft Windows* 2.01. It features overlapping windows, and can use protected mode on the 80286 processor. [75] [130] [346.193,206] [477.159] [909.231] [1639.110] [1897.128] (v2.03 January 1988 [136] [1299.359] [1886.67]) (November [146] [346.270])

		<b>Microsoft Office Home and Student 2000</b> Microsoft Software... New \$84.99 Best \$65.00		<b>Windows Live OneCare 2.0</b> Microsoft Software... New \$26.99 Best \$9.99		<b>Norton 360 2.0</b> Symantec New \$39 Best \$22
---	---	---	---	--	---	--

### **December**

- Microsoft ships *Microsoft Windows/386* software. [909.231] [1629.34] [1639.110] [1897.128] (November [346.270])
- Microsoft ships the one millionth copy of *Windows*. [346.270] [1897.128]

## **1988**

### **March**

- Microsoft introduces the *Microsoft SDK for Windows*. [1049.133]

### **March 17**

- Apple Computer files an 11-page copyright infringement suit in federal court in San Jose, California, accusing Microsoft of stealing visual display features of the Macintosh computer for use in *Microsoft Windows* 2.0. Apple claims *Windows* violates 13 different copyrights. Hewlett-Packard is also named as a defendant.

defendant, for copyright violations in its *New Wave* software. [38] [46] [75] [309.256] [328.15] [3 [346.270] [477.160] [548.337] [580.191] [909.231] [1149.352] [1886.67] [2142.31]

**May 20**

- Judge Robert Aguior agrees to split the Apple Computer - Microsoft case into two separate phase to decide if Microsoft had been licensed to use Macintosh features in *Windows 2.03*, and, if necessary, determine if Microsoft had violated Apple's copyrights. [1299.363]

**June**

- Microsoft ships *Windows/286 2.1*. [136] [146] [1897.129] (July [909.231]) (*Windows 286 2.0* [16 [1987 [45]])
- Microsoft ships *Windows/386 v2.1*. [136] [146] (July [909.231]) (1987 [45])

**October**

- Microsoft ships the 1 millionth copy of *Microsoft Windows 2.0*. [606.81]

## 1989

**March 21**

- In San Francisco Federal District Court, Judge William Schwarzer rules that *Microsoft Windows 2* was not covered in the Apple Computer / Microsoft 1985 technology licensing agreement. The judge ruled that only *Windows 1.0* as it appeared in November 1985 was covered, and that *Windows 2.03* is fundamentally different. This allows the issue to proceed to trial, in the suit of Apple Computer against Microsoft. [309.256] [1149.355] [1299.383] (April [346.195])

**(month unknown)**

- Quote from a Lotus Development official, while demonstrating a new DOS version of *Lotus 1-2-3*: "I don't see *Windows* as a long-term graphical interface for the masses.". (*Within a year, Microsoft will release Windows 3.0, firmly establishing Windows as a long-term graphical interface for the masses.*) [312.14]

**July 21**

- US Federal District Judge William Schwarzer tentatively rules that most visual features of *Windows 2.03* are covered by the 1985 license agreement between Microsoft and Apple computer. Of 260 similar claims claimed by Apple, ten remain to be decided. [2142.31]

**November 13**

- At the fall COMDEX show, IBM strongly endorses *Microsoft Windows* for low end PCs, and Microsoft publicly endorses *OS/2* as the future platform for higher-end PCs. IBM and Microsoft agree to jointly develop a consistent, full-range of systems software. [38] [45] [123] [389.29] [477.160] [1064.22] [1149.358]
- IBM and Microsoft issue a joint statement that Microsoft would hold back features for *Windows* to facilitate industry acceptance of *OS/2*. (*This letter causes the Federal Trade Commission to begin an investigation of Microsoft for anticompetitive collusion.*) [1149.373]

---

End of 1981-1989. Next: 1990.

---

The complete timeline can be purchased in a PDF file for US\$10 from the author.

You can pay now directly via PayPal. When I receive notification from PayPal, I will email you the file.

US\$10 (via PayPal)

Exhibit 66 Page 554

or send me an email to request my mailing address to mail payment.

**ManageEngine Desktop Central**  
Desktop Management Software for Active Directory, Workgroup, Novell® & WAN

- ✓ Software Deployment
- ✓ Patch Management
- ✓ Asset Management
- ✓ Remote Control
- ✓ Configurations
- ✓ Windows Tools

Starts €  
**Free Trial**

[www.manageengine.adventnet.com](http://www.manageengine.adventnet.com)

Feedback -

**1981-1989** | **1990-1993** | **1994-1996** | **1997-1999** | **2000-end**

A list of references to all source material is available.

Other web pages of interest:

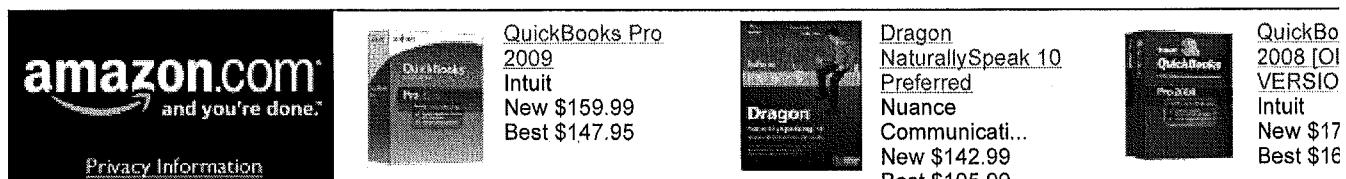
- [Chronology of Personal Computers](#)
- [Personal Computer References in Pop Culture](#)
- [Chronology of Microprocessors](#)
- [Chronology of Handheld Computers](#)
- [Chronology of Workstation Computers](#)
- [Ken P's Today in History](#)

Last updated: 2008 October 29.

Copyright © 2007-2008 Ken Polsson (email: [kpolsson@islandnet.com](mailto:kpolsson@islandnet.com)).

URL: <http://www.islandnet.com/~kpolsson/windows/>

Link to Ken P's [home page](#).



Hosted & Powered by  
**islandnet.com**

Exhibit G Page 555

# Chronology of Microsoft Windows Operating Systems

Copyright © 2007-2008 Ken Polsson  
 internet e-mail: [kpolsson@islandnet.com](mailto:kpolsson@islandnet.com)

All rights reserved. Permission is granted to create web links  
 to this site, not to copy these pages to other web sites.  
 URL: <http://www.islandnet.com/~kpolsson/windows/>

References are numbered in [brackets], which are listed [here](#). A number after the dot gives the page in the source.

Last updated: 2008 October 29.

## **Fix Microsoft Windows**

Fix Microsoft Windows In 1 Minute 100%  
 Free Scan! Recommended  
[Microsoft-Errors.ErrorFix.com](http://Microsoft-Errors.ErrorFix.com)

## **Repair Your Windows XP**

Free Registry Scan, Fix Errors & Improve  
 Performance - 5 Star Rated  
[www.PCTools.com](http://www.PCTools.com)

## **Registry Cleaners Exposed**

Don't Download Any Registry Clean  
 You See This Shocking Review!  
[RegistryCleanerHelp.org](http://RegistryCleanerHelp.org)

V V

Ads

<a href="#">1981-1989</a>	<a href="#">1990-1993</a>	<a href="#">1994-1996</a>	<a href="#">1997-1999</a>	<a href="#">2000-end</a>
---------------------------	---------------------------	---------------------------	---------------------------	--------------------------

## 1990

### May 22

- At the Center City at Columbus Circle in New York, Microsoft introduces and ships *Microsoft Windows* 3.0. This version allows addressing memory above 640 kB. Microsoft spends US\$3 million for off-day marketing, as part of a US\$10 million promotional campaign. [15] [28] [45] [75] [123] [146] [346.239] [346.272] [379.256] [389.29] [477.161] [479.128] [548.159] [595.26] [606.81] [620.13] [618.296] [721.156] [769.4] [909.232] [1149.359] [1299.1] [1527.176] [1639.114] [1897.129]

### (month unknown)

- John Dvorak quote: "I think *Windows* 3.0 will get a lot of attention; people will check it out, and then long they'll all drift back to raw *DOS*. Once in a while they'll boot *Windows* for some specific purpose, many will put it in the closet with the Commodore 64.". [648.20]

### September

- IBM and Microsoft end co-operative work on operating systems, dividing up work-to-date between in a series of cross-licensing agreements. Microsoft will work on *Windows*, *DOS*, and a portable version of *OS/2*. IBM will continue development of 16-bit (v1.x) and 32-bit (v2.0) versions of *OS/2*. [162] [346] [379.256] [477.161] [511.95] [795.15] [909.232] [1299.399] [1897.129] (November [38])

### (month unknown)

- Microsoft ships the one millionth copy of *Windows* 3.0. [1149.362]

### December

- Microsoft begins shipping the first version of the Object Linking and Embedding (OLE) library for *Microsoft Windows* 3.0. [511.67]

### Year

- Shipments of *Microsoft Windows* 3.0 for the year: 2.75 million. [1080.197]

## 1991

Exhibit 66 Page 556

**January**

- Microsoft announces *Microsoft Windows for Pen Computing*. It will include handwriting-recognition software. [1093.159] [1149.393]
- Microsoft announces the *Windows New Technology* operating system. [909.232]

**March 6**

- In the lawsuit of Apple Computer versus Microsoft and Hewlett-Packard, Federal District Court Judge Vaughn Walker in San Francisco denies Hewlett-Packard's request to declare Apple's copyrights invalid and also rejects Microsoft's argument that portions of *Windows* are covered by the 1985 license from Apple. However, the judge agrees to Microsoft's request to consider the copyright issue feature-by-feature rather than on the basis of overall look and feel. [346.195]

**March 18**

- In San Francisco, California, the Software Publisher's Association holds its Spring Symposium, including the Excellence in Software Awards ceremony. Winners include: Best Business Program: *Microsoft Windows 3.0*. [1498.64]

**April**

- In the lawsuit of Apple Computer versus Microsoft and Hewlett-Packard, Apple broadens its suit to include *Windows 3.0*. [346.195]

**(month unknown)**

- Quote by Aaron Goldberg, of International Data Corp.: "I don't know if anyone has tried to run *Windows* on a 286 machine, but frankly I'd rather have knitting needles in my eyes.". [169]

**May**

- One year after the release of *Microsoft Windows 3.0*, more than three million copies have been sold [618.296] [1629.34] (over four million [1299.9])

**July**

- Microsoft changes the name of *OS/2 v3.0* to *Windows NT*. [40]

**October 8**

- At the American Museum of Natural History in New York City, the Multimedia Marketing Council launches the Multimedia PC. Keynote speakers include James Burke and Bill Gates. Requirements for the Multimedia PC are: 80286 processor, 2 MB RAM, 40 MB hard drive, VGA graphics, two-channel audio record/playback, CD-ROM, and *Microsoft Windows* with Multimedia extensions. [704.217] [1530.62]

**October**

- Microsoft releases *Windows 3.0a* with Multimedia Extensions. Included is Microsoft's first media player software; it can play CD audio and WAV files. [1608.38] [1897.129]
- At the COMDEX show, Microsoft gives the first public demonstration of *Windows NT*. [909.232]

**December 31**

- Total shipments of *Microsoft Windows 3.0* to date: 15 million. [606.141]

**Year**

- Desktop operating system market share in the world: *Microsoft Windows* 75%. [1429.58]

## 1992

**January**

- Microsoft releases the *Windows Style Guide*. [688.99]
- Microsoft hosts the *Windows NT* developers conference. [1059.28]
- Microsoft hosts a User Interface Design Preview, to solicit input on the *Windows* interface from various application developers. [688.99]

**March**

- Microsoft launches its first TV advertising campaign, for *Windows*. [123]

**April**

Exhibit 66 Page 557

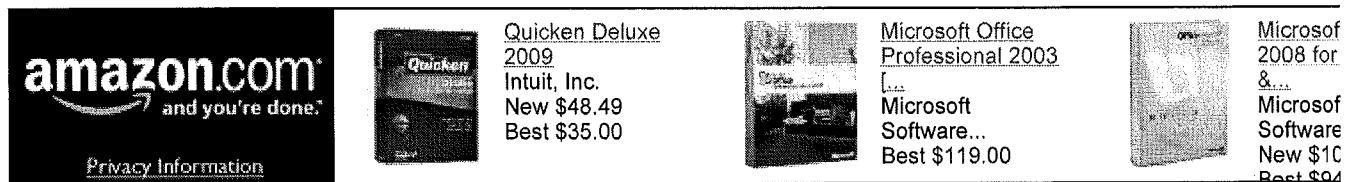
- IBM ships the *OS/2* 2.0 operating system. It requires an Intel 386 processor, 4 MB RAM, and adds *OS/2* 3.0 for *Windows* 3.0 compatibility. Code-name during development was Cruiser. [477.165] [606.81] [688.44,688.107] [734.347] [858.71] [1299.383] [1572.28] (March [1057.32] [1639.116])

#### April 6

- At the Comdex / Windows World conference, Microsoft unveils *Windows* 3.1, including scalable TrueType fonts. The software comprises over 3 million lines of code. (*One million copies of the new upgrade versions are sold through retail channels within the first 50 days.*) [75] [123] [388.6] [47] [479.128] [620.131] [688.44] [909.232] [1057.32] [1271.36] [1299.437] [1629.34] [1639.116] [18] [1897.130] (May [509.177] [534.130] [721.156])

#### April

- Microsoft releases the Microsoft SDK for *Windows* 3.1. Price is US\$349. [1049.133]
- Microsoft ships *Windows for Pen Computing* operating system. [1093.159] [1897.130]
- In Boston, Massachusetts, Microsoft and Digital Equipment announce *Windows NT* for computers on the 64-bit Alpha processor. [1299.438]



#### April 30

- In the first four months of the year, Microsoft has shipped 10 million copies of *Windows* 3.0. [606] [1057.155]

#### June

- IBM and Microsoft sign a "divorce" document, formally ending their cooperation on operating system development. IBM claims no rights to *Windows NT*, can use *Windows* source code until September, and will pay Microsoft a royalty for each copy of *OS/2* sold. Microsoft pays a lump sum of US\$24 million for the use of IBM patents. [68] [1299.438]

#### (month unknown)

- Microsoft ships the Windows Sound System. [909.238]
- Nolan Bushnell, chairman of Octus, quote: "Within three years, televisions will have either a Win or Mac interface.". [1049.16]

#### July 6

- The Win32 Professional Developers Conference is held, in San Francisco, California. Microsoft first makes public mention of work on "Chicago", the next version of *Windows*. Microsoft also gives away 4500 copies of Win32 SDK and pre-release versions of *Windows NT* for Intel 386/486 processors and MIPS R4000 processors. [909.232] [737.24] [954.1] [606.82] [1639.116] (July 4 [1639.116]) (Win32 Professional Developers Conference) [955.20] [1059.28])

#### October

- Microsoft releases 50,000 copies of the first beta-test version of Windows NT. [928.67]

#### October 27

- Microsoft ships *Microsoft Windows for Workgroups* 3.1, which integrates networking and workgroup functionality. [123] [210.38] [909.236] [1264.42] [1629.34] [1639.123] [1648.52] (November [47])

#### Year

- Shipments of Microsoft Windows for the year: over 10 million units. [915.27]

**1993**

Exhibit 66 Page 558

**(month unknown)**

- Microsoft *Windows* replaces *DOS* as the best-selling software application. [1700.24]

**March**

- At Microsoft's Windows Hardware Engineering Conference, the Plug and Play initiative is unveiled. Compaq Computer, Intel, Microsoft, and Phoenix Technologies are initial supporters. [694.80] [91] [1432.27] (April [122])
- The Software Publishers Association reports that MS-Windows applications are outselling MS-DOS programs for the first time. [479.128] [1629.34]

**April**

- Microsoft releases the OLE 2.0 specification for Windows development. [479.129] [687.120]
- Microsoft reports that there are 25 million licensed users of *Microsoft Windows*. [123] [389.29] [1] [1897.130]

**May 11**

- Microsoft chairman Bill Gates approves a plan by product manager Russ Siegelman to create an online service and include it as part of the next *Windows* release. Code-name for the product is Marvel. (It would later emerge as the *Microsoft Network* in August 1995.) [1700.26]

**May 24**

- At the COMDEX show, Microsoft formally launches the *Windows NT* operating system. Initial version is 3.1. Price is US\$495, or US\$295 as an upgrade from a previous Windows operating system. The software comprises over 4 million lines of code. [123] [374.4] [909.236] [985] [1271.36] [1559] [1639.124] [1648.52] (July [548.159] [721.156]) (July 1992 [387.98] [479.129])

**June 1**

- U.S. District Court Judge Vaughn Walker rules against Apple Computer in its 63-month legal suit against Microsoft and Hewlett-Packard. The judge rules that ninety percent of the elements in Windows are covered by Microsoft's 1985 license from Apple Computer. Apple Computer files an appeal. [61] [123] [389.29] [548.338] [580.191] [1299.463]

**June**

- IBM releases OS/2 2.1, now including Win-OS/2 3.1 Windows 3.1 support. Code-name during development was Borg. [60] [479.129] [858.71] [689.231] [1312]

**July**

- Microsoft begins shipping Windows NT Workstation 3.1, and Windows NT Advanced Server 3.1. [567.132] [1299.461] (August [66])

**August**

- Apple Computer loses its appeal of the ruling in favor of Microsoft in June, ending its legal battle with Microsoft Windows. [582.92] [1886.69]
- Microsoft releases the *Windows NT* 3.1 operating system. The software comprises 6.5 million lines of code. [1182.166] [1897.130]

**September**

- The 1992 Joint Development contract between IBM and Microsoft, in which each company had access to the other's source code for OS/2 and Windows, expires. [501.102] [544.30]

**October**

- IBM and Motorola announce the PowerPC Reference Platform (PReP) specification. With this, system makers could make compatible systems that can run shrink-wrapped applications. Such systems could include AIX, Solaris, Windows NT, and others. [881.81] [1099]

**November 8**

- Microsoft ships *Windows for Workgroups* 3.11. [123] [479.129] [538] [909.236] [1559] [1629.35] [1639.124] (March [721.156])

**December 10**

- SunSoft (a subsidiary of Sun Microsystems) ships the first version of WABI, providing Microsoft Windows application compatibility on Solaris, Intel, and Sparc versions of UNIX. [73] [1365.40]

Exhibit 66 Page 559

**Year**

- Shipments of Microsoft Windows operating system for the year: 25 million. [824]
  - Shipments of Microsoft Windows NT for the year: 300,000. [507.32] (500,000 [824])
- 

End of 1990-1993. Next: 1994.

Exhibit 66 Page 560